

## **SUMMARY IN ENGLISH**

The purpose of the flight was reindeer herding. The crew consisted of one pilot. The pilot had many years of experience in the operation, both with the current helicopter type and other types. The helicopter was equipped for the mission with plates on the landing site, so-called bear paws. Such plates allow landing on soft ground and snow, where the helicopter would otherwise sink through the ground. Landing under such conditions is very common in connection with reindeer herding.

The accident occurred when the helicopter was going to land and pick up a person for the continued operation. The landing site consisted of wet mire with higher tufts. The person to be picked up waited some twenty metres from the landing site and turned away from the helicopter to escape the rotor wind and swirling objects.

After setting down the helicopter, the pilot felt that it was unsteady due to a turf under the left landing gear. He therefore decided to lift up in order to move the helicopter slightly to the right. In connection with that, he experienced a sudden roll movement to the right. Although the collective pitch lever was lowered immediately, the helicopter continued to roll to the right with the main rotor hitting the ground and the helicopter resting on the right side. The damages were extensive but the pilot was uninjured. There was no fire and the pilot could evacuate of the helicopter by himself.

No rescue service was alerted and no rescue service was conducted.

During the accident site investigation it was found that the plate that was mounted on the right rear part of the helicopter's landing gear (so-called "bear paw") had been turned slightly clockwise. On a turf, near the left of the helicopter, were marks indicating that the plate had got stuck to it. The marks corresponded to those that can be created by the edge of the plate.

When the bear paw installation was examined more closely, the investigation team found that the plate was mounted so that it could be forced to rotate about 20 degrees clockwise and about 80 degrees counterclockwise from its normal position (see Figures 4 and 5).

Interviews with the pilot confirm that he did not experience any evidence of a technical failure on the helicopter before or during the accident.

The accident was caused by the plate mounted on the right rear part of the helicopter's landing gear getting stuck in a turf under the helicopter in connection with hovering, and by the pilot not being able to stop the roll tendency.

SHK has investigated a similar accident in 2019 (Final report RL 2019:14).

## **Safety Recommendations**

### **The Swedish Transport Agency is recommended to:**

Inform as appropriate about the accidents and risks of bear paws getting stuck in connection with hovering, lift off and setting. (RL 2020:03 R1)